

<i>Project Wild</i>		Alignment with MVC & Ann Arundel County Science Standards Grades 6-8 ⁱ			
Project Wild Activity	Page	Reading/ Language Arts	Social Studies	Science	Mathematics
HABITAT LAP SIT – GRADE 5-8 STUDENTS IDENTIFY COMPONENTS OF HABITAT; RECOGNIZE HOW HUMANS & OTHER ANIMALS DEPEND UPON HABITAT; & INTERPRET THE SIGNIFICANCE OF LOSS OR CHANGE IN HABITAT IN TERMS OF PEOPLE & WILDLIFE. NOTE: THIS INVOLVES PHYSICAL EDUCATION. ANN ARUNDEL COUNTY SCIENCE STANDARDS Grade 6 3.8.7 Life Science: Evolution. Factors that influence the size & stability of populations; 3.8.11 Life Science: Biochemistry. All consumers in a food chain depend on the chemical energy provided by producers for survival; 3.8.13 Life Science: Ecology. Changes that occur due to interactions in the environment; determine if they are beneficial or detrimental (e.g., producer/ consumer, predator/prey, or parasite/host); [potential exists to meet 6.8.1 Environmental Science: Flow of Matter & Energy. Matter is transformed between the physical environment & organisms (e.g., food webs, nitrogen cycle); the total amount of matter remains constant]; 6.8.2 Environmental Science: Interdependence of Organisms. Interdependency of organisms with the environment in a given ecosystem (i.e., producer/ consumer, predator/prey, host/parasite). Grade 7 [potential exists to meet 6.8.1 Environmental Science: Flow of Matter & Energy. Matter is transformed between the physical environment & organism (e.g., food webs, nitrogen cycle); the total amount of matter remains constant]; 6.8.5 Environmental Issues. How human activities can accelerate or magnify many naturally occurring changes (i.e., erosion, air and water quality, populations). Grade 8 6.8.5 Environmental Science: Environmental Issues: How human activities can accelerate or magnify many naturally occurring changes (i.e., erosion, air & water quality, populations).	61	1.0 General Reading Processes: Vocabulary D. Vocabulary. Develop and apply vocabulary.	[potential exists to meet Grade 7 3.0 Geography: D. Modifying & Adapting the Environment (economic trade offs when using natural resources; consequences; land use issues; how govt. addresses env. issues]	1.0 Skills & Processes: A. Constructing Knowledge; B. Applying Evidence and Reasoning Grade 6 3.0 Life Science: D. Evolution. 1. The growth and survival of organisms and species depend on physical conditions (resource competition; environmental changes); F. Ecology. 1. The number of organisms an environment can support depends on the physical conditions and resources available: a-d. Grade 7 3.0 Life Science: E. Flow of Matter and Energy. 1. Compare how plants & animals meet their needs. Grade 8 3.0 Life Science: D. Evolution. 1. Evolutionary change is a result of environmental changes. 6.0 Environmental Science: B. Environmental Issues	None

Project Wild Activity	Page	Reading/English Language Arts	Social Studies	Science	Mathematics
<p>OH DEER! – GRADES 5-8+</p> <p>STUDENTS WILL IDENTIFY AND DESCRIBE FOOD, WATER, AND SHELTER AS THREE ESSENTIAL COMPONENTS OF HABITAT; DESCRIBE THE IMPORTANCE OF GOOD HABITAT FOR ANIMALS; DEFINE “LIMITING FACTORS” AND GIVE EXAMPLES; AND RECOGNIZE THAT SOME FLUCTUATIONS IN WILDLIFE POPULATIONS ARE NATURAL AS ECOLOGICAL SYSTEMS UNDERGO CONSTANT CHANGE.</p> <p>NOTE: THIS ACTIVITY INVOLVES PHYSICAL SCIENCE.</p> <p>ANN ARUNDEL COUNTY SCIENCE STANDARDS</p> <p>Grade 6 3.8.7 Life Science: Evolution. Analyze factors that influence the size and stability of populations; 3.8.11 Life Science: Biochemistry. Explain how all consumers in a food chain depend on the chemical energy provided by producers for survival; 3.8.13 Life Science: Ecology. Analyze changes that occur due to interactions in the environment & determine if they are beneficial or detrimental from different perspectives (e.g., producer/consumer, predator/prey, or parasite/host); <p>[potential exists to meet 6.8.1 Environmental Science: Flow of Matter & Energy. Explain how matter is transformed between the physical environment & organisms (e.g., food webs, nitrogen cycle) and that the total amount of matter remains constant].</p> 6.8.2 Environmental Science: Interdependence of Organisms. Identify & explain the interdependency of organisms with the environment in a given ecosystem (i.e., producer/consumer, predator/prey, host/parasite).</p> <p>Grade 8 6.8.5 Environmental Science: Environmental Issues. Analyze how human activities can accelerate or magnify many naturally occurring changes (i.e., erosion, air & water quality, populations).</p>	36	<p>1.0 General Reading Processes: Vocabulary D. Vocabulary. Develop and apply vocabulary.</p>	<p>[potential exists to meet Grade 7 3.0 Geography: D. Modifying & Adapting the Environment (economic trade offs when using natural resources; consequences; land use issues; how govt. addresses env. issues)]</p>	<p>1.0 Skills & Processes: A. Constructing Knowledge B. Applying Evidence and Reasoning; C. Communicate Scientific Information.</p> <p>Grade 6 3.0 Life Science: D. Evolution. 1. The growth and survival of organisms and species depend on physical conditions (competition for resources; environmental changes); F. Ecology. 1. The number of organisms an environment can support depends on the physical conditions and resources available: a-d.</p> <p>Grade 7 3.0 Life Science: E. Flow of Matter and Energy. 1. Compare how plants & animals meet their needs.</p> <p>Grade 8 3.0 Life Science: D. Evolution. 1. Evolutionary change is a result of environmental changes.</p> <p>6.0 Environmental Science: B. Environmental Issues</p>	<p>1.0 Knowledge of Algebra, Patterns & Functions: C. Numeric & Graphic Representations 1.b. Create a graph; 2. a. Identify & describe changes in a graph.</p> <p>4.0 Knowledge of Statistics: A. Data Displays (different graphs/plots per grade); B. Data Analysis.</p> <p>7.0 Processes of Math Relate or apply math to other disciplines & to life (a-d).</p>

Project Wild Activity	Page	Reading/English Language Arts	Social Studies	Science	Mathematics
<p>HOW MANY BEARS CAN LIVE IN THE FOREST? – GRADES 5-8 STUDENTS WILL DEFINE A MAJOR COMPONENT OF HABITAT; AND IDENTIFY A LIMITING FACTOR. NOTE: THIS ACTIVITY INVOLVES PHYSICAL SCIENCE.</p> <p>ANN ARUNDEL COUNTY SCIENCE STANDARDS</p> <p>Grade 6 3.8.7 Life Science: Evolution. Analyze factors that influence the size and stability of populations; 3.8.11 Life Science: Biochemistry. Explain how all consumers in a food chain depend on the chemical energy provided by producers for survival; 3.8.13 Life Science: Ecology. Analyze changes that occur due to interactions in the environment & determine if they are beneficial or detrimental from different perspectives (e.g., producer/consumer, predator/prey, or parasite/host). [potential exists to meet 6.8.1 Environmental Science: Flow of Matter & Energy. Explain how matter is transformed between the physical environment & organisms (e.g., food webs, nitrogen cycle) and that the total amount of matter remains constant]. 6.8.2 Environmental Science: Interdependence of Organisms. Identify & explain the interdependency of organisms with the environment in a given ecosystem (i.e., producer/consumer, predator/prey, host/parasite).</p> <p>Grade 8 6.8.5 Environmental Science: Environmental Issues. Analyze how human activities can accelerate or magnify many naturally occurring changes (i.e., erosion, air & water quality, populations).</p>	23	<p>1.0 General Reading Processes: Vocabulary D. Vocabulary. Develop and apply vocabulary.</p>	None	<p>Grade 6 3.0 Life Science: D. Evolution. 1. The growth & survival of organisms & species depend on the physical conditions (selective breeding; resource competition; environmental changes). F. Ecology. 1. The number of organisms an environment can support depends on the physical conditions and resources available: a. populations increase or decrease relative to availability of resources & environmental conditions; b. limiting factors; c. competition for resources; d. competition is reduced w/niches; Grade 7 3.0 Life Science: E. Flow of Matter & Energy. 1. How plants/animals meet their needs (cycles: water; nitrogen; matter); Grade 8 3.0 Life Science: D. Evolution 1. Recognize and describe that evolutionary change in species is a result of natural variation in organisms and environmental changes. (gradual & sudden; adaptations; extinction; species diversity).</p>	<p>6.0 Knowledge of Number Relationships & Computation: C. Number Computation: (add, subtract, multiply, divide, calculate percentage). 7.0 Processes of Math Relate or apply math to other disciplines & to life (a-d).</p>

Project Wild Activity	Page	Reading/English Language Arts	Social Studies	Science	Mathematics
LEARNING TO LOOK, LOOKING TO SEE - GRADES K-8 STUDENTS WILL DESCRIBE DIFFERENCES SEEN IN AN ENVIRONMENT AS THE RESULT OF CASUAL AND DETAILED OBSERVATION; AND GIVE REASONS FOR THE IMPORTANCE OF LOOKING CLOSELY AT ANY ENVIRONMENT. NOTE: THIS ACTIVITY CAN INVOLVE ART. ANN ARUNDEL COUNTY SCIENCE STANDARDS Grade 6 <p>[potential exists to meet 3.8.12 Life Science: Ecology. Analyze evidence that within ecosystems organisms have different functions (niches) that enable the ecosystem to survive.]</p>	278	1.0 General Reading Processes: Vocabulary D. Vocabulary. Develop and apply vocabulary. 4.0 Writing: 2 (a) Compose oral, written, and visual presentations (drawing; journals; 6.0 Listening: attend & respond to the speaker; asking questions; summarizing; following a set of directions.	None	1.0 Skills & Processes A. Constructing Knowledge; B. Applying Evidence and Reasoning [potential exists to meet Grade 7 3.0 Life Science: A. Diversity of Life 1. Compile evidence to verify the claim of biologists that the features of organisms connect or differentiate them (external & internal features/behavioral pattern) - classification]	None
WHAT DID MY LUNCH COST WILDLIFE? – GRADES 5-8 STUDENTS WILL TRACE SOME FOODS FROM THEIR SOURCE TO THE CONSUMER; IDENTIFY IMPACTS FOODS AND THEIR PROCESSING HAVE ON WILDLIFE & THE ENVIRONMENT IN GENERAL; & RECOMMEND, WITH EXPLANATIONS, SOME FOOD HABITS THAT COULD BENEFIT THE ENVIRONMENT. ANN ARUNDEL COUNTY SCIENCE STANDARDS Grade 8 6.8.4 Environmental Science: Natural Resources & Human Needs. Different parts of the world have varying amounts & types of natural resources; how the use of those resources determines environmental quality (i.e., soil erosion, water pollution, deforestation); 6.8.5 Environmental Science: Environmental Issues. Human activities can accelerate or magnify many naturally occurring changes (i.e., erosion, air & water quality, populations).	68	None	Grade 7 3.0 Geography: D. Modifying & Adapting the Environment (trade offs & consequences when using natural resources; land use issues; how govt. addresses env. issues; 4.0 Economics: A.1. (sustainable devt.); 4.c. (natural resource use & pop. growth impact econ. devt.	1.0 Skills & Processes A. Constructing Knowledge; B. Applying Evidence and Reasoning; C. Communicate Scientific Information 6.0 Environmental Science: A. Natural Resources & Human Needs; B. Environmental Issues	None

Project Wild Activity	Page	Reading/English Language Arts	Social Studies	Science	Mathematics
<p>HAZARDOUS LINKS, POSSIBLE SOLUTIONS (GRADES 7-8) STUDENTS GIVE EXAMPLES OF WAYS IN WHICH PESTICIDES ENTER FOOD CHAINS; DESCRIBE POSSIBLE CONSEQUENCES OF PESTICIDES, & DESCRIBE HOW REGULATIONS ATTEMPT TO CONTROL PESTICIDE USE. NOTE: THIS ACTIVITY INVOLVES ART.</p> <p>ANN ARUNDEL COUNTY SCIENCE STANDARDS Grade 6 3.8.7 Life Science: Evolution. Factors that influence the size and stability of populations; 3.8.11 Life Science: Biochemistry. All consumers in a food chain depend on the chemical energy provided by producers for survival; 3.8.13 Life Science: Ecology. Changes that occur due to interactions in the environment; determine if they are beneficial or detrimental (e.g., producer/consumer, predator/prey, or parasite/host); [potential exists to meet 6.8.1 Environmental Science: Flow of Matter & Energy. Matter is transformed between the physical environment & organisms (e.g., food webs, nitrogen cycle); the total amount of matter remains constant]. 6.8.2 Environmental Science: Interdependence of Organisms. Interdependency of organisms with the environment in a given ecosystem (i.e., producer/consumer, predator/prey, host/parasite). Grade 8 6.8.4 Environmental Science: Natural Resources & Human Needs: Different parts of the world have varying amounts & types of natural resources & how the use of those resources determines environmental quality (i.e., soil erosion, water pollution, deforestation); 6.8.5 Environmental Issues. Human activities can accelerate or magnify many naturally occurring changes (i.e., erosion, air & water quality, populations).</p>	326	<p>1.0 General Reading Processes: Vocabulary D. Vocabulary. Develop and apply vocabulary.</p>	<p>Grade 7 3.0 Geography: D. Modifying & Adapting the Environment (trade offs when using natural resources; consequences; land use issues; how govt. addresses env. issues.</p> <p>[w/Extension #2, potential exists to meet Grade 7 4.0 Economics A. Scarcity & Economic Decision-making 2. Sustainable devt; 4.c. How natural resources & pop. growth influence econ. devt; public health issues; B. Economic Systems & the Role of Government 2.d. Impacts of regulatory agencies (env. protection].</p>	<p>Grade 7 3.0 Life Science. .E. Flow of Matter and Energy. 1. How plants & animals meet their needs.</p> <p>Grade 8 3.0 Life Science. D. Evolution. 1. Evolutionary change in species is a result of natural variation in organisms and environmental changes (gradual & sudden environmental changes; adaptations; extinction; species diversity).</p> <p>6.0 Environmental Science A. Natural Resources and Human Needs B. Environmental Issues</p>	None
<p>STORMY WEATHER (GRADES 5-8) STUDENTS WILL GENERALIZE THAT HUMANS AND WILDLIFE SHARE ENVIRONMENTS AND EXPERIENCE SOME OF THE SAME NATURAL PHENOMENA. NOTE: INVOLVES MUSIC.</p> <p>THIS ACTIVITY DOES NOT CORRELATE WITH GRADE 6-8 ANN ARUNDEL COUNTY SCIENCE STANDARDS.</p>	85	<p>6.0 Listening: attend & respond to the speaker; asking questions; summarizing; following a set of directions.</p>	None	<p>[Note: good Engagement activity for: Grade 8 2.0 Earth & Space Science: E. Interactions of Hydrosphere & Atmosphere: 3. atmospheric conditions related to weather systems: a. fronts; b. atmospheric & hydrospheric conditions associated with severe weather].</p>	None

Project Wild Activity	Page	Reading/English Language Arts	Social Studies	Science	Mathematics
SATURDAY MORNING WILDLIFE WATCHING - GRADES 5-8 STUDENTS WILL DISCRIMINATE BETWEEN REALISTIC AND UNREALISTIC PORTRAYALS OF WILDLIFE AND OTHER ANIMALS IN CARTOONS; IDENTIFY POSSIBLE INFLUENCES ON PEOPLE FROM WATCHING CARTOONS; AND MAKE JUDGEMENTS ABOUT APPROPRIATE AND INAPPROPRIATE BEHAVIORS THEY THINK CAN RESULT FROM CARTOON WATCHING. THIS ACTIVITY DOES NOT CORRELATE WITH GRADE 6-8 ANN ARUNDEL COUNTY SCIENCE STANDARDS.	184	[Evaluation: Write a Story 4.0 Writing: 1 Compose to express personal ideas, inform, & persuade; 4. how language choices affect thoughts/feelings; 5. the effectiveness of details, word choice, syntax, use of figurative language, and rhetorical devices in the student's own composing].	None	1.0 Skills & Processes A. Constructing Knowledge; B. Applying Evidence and Reasoning With OPTIONAL component: Grade 7 3.0 Life Science: A. Diversity of Life 1. Classification (external & internal features; behavioral patterns).	None
QUICK FROZEN CRITTERS - GRADES 5-8 STUDENTS DISCUSS PREDATOR/PREY RELATIONSHIPS; DESCRIBE THE IMPORTANCE OF ADAPTATIONS IN PREDATOR/PREY RELATIONSHIPS; & RECOGNIZE THAT LIMITING FACTORS AFFECT WILDLIFE POPULATIONS. NOTE: INVOLVES PHYSICAL SCIENCE. ANN ARUNDEL COUNTY SCIENCE STANDARDS Grade 6 - 3.8.7 Life Science: Evolution. Factors that influence the size and stability of populations; 3.8.11 Biochemistry. All consumers in a food chain depend on the chemical energy provided by producers for survival; [potential exists to meet 3.8.12 Ecology. Within ecosystems organisms have different functions (niches) that enable the ecosystem to survive]; 3.8.13 Ecology. Changes that occur due to interactions in the environment; determine if they are beneficial or detrimental (e.g., producer/ consumer, predator/prey, or parasite/host); [potential exists to meet 6.8.1 Environmental Science: Flow of Matter & Energy. Matter is transformed between the physical environment & organisms (e.g., food webs, nitrogen cycle); the total amount of matter remains constant]. 6.8.2 Interdependence of Organisms. Interdependency of organisms with the environment in a given ecosystem (i.e., producer /consumer, predator/prey, host/parasite). Grade 8 - 6.8.5 Environmental Science: Environmental Issues. Human activities can accelerate or magnify many naturally occurring changes (i.e., erosion, air & water quality, populations).	122	1.0 General Reading Processes: Vocabulary D. Vocabulary. Develop and apply vocabulary. [Evaluation #4: Write about a predator: 4.0 Writing: 1. Compose to express personal ideas, inform, and persuade; 4. ID how language choices affect thoughts and feelings; 5. Assess the effectiveness of details, word choice, syntax, use of figurative language, and rhetorical devices in the student's own composing].	None	1.0 Skills & Processes A. Constructing Knowledge; B. Applying Evidence and Reasoning Grade 6 3.0 Life Science: D. Evolution. 1. The growth & survival of organisms & species depend on physical conditions (competition for resources; environmental changes); F. Ecology. 1. The number of organisms an environment can support depends on physical conditions/ available resources. Grade 7 3.0 Life Science: E. Flow of Matter and Energy. 1. How plants / animals meet their needs. Grade 8 3.0 Life Science: D. Evolution. 1. Evolutionary change in species is a result of natural variation in organisms & environmental changes.	None

Project Wild-Aquatic

		Alignment with MVC & Ann Arundel County Science Standards Grades 6-8 ⁱ			
WETLAND METAPHORS GRADES 5-8 STUDENTS WILL DESCRIBE THE CHARACTERISTICS OF WETLANDS, AND EVALUATE THE IMPORTANCE OF WETLANDS TO WILDLIFE AND HUMANS. ANN ARUNDEL COUNTY SCIENCE STANDARDS Grade 6 [potential exists to meet 3.8.10 Biochemistry: Explain that energy entering the ecosystem as sunlight is transferred by producers into chemical energy through photosynthesis]. Grade 8 6.8.5 Environmental Science: Environmental Issues. Human activities can accelerate or magnify many naturally occurring changes (i.e., erosion, air & water quality, populations).	39	1.0 General Reading Processes: Vocabulary D. Vocabulary. Develop and apply vocabulary.	[potential exists to meet Grade 7 3.0 Geography: D. Modifying & Adapting the Environment (trade offs & consequences when using natural resources; land use issues; how govt. addresses env. issues].	Grade 6 3.0 Life Science: F. Ecology. 1. Number of organisms an environment can support depends on the physical conditions & resources available. Grade 7 3.0 Life Science: E. Flow of Matter and Energy. 1. How plants and animals meet their needs. 6.0 Environmental Science A. Natural Resources and Human Needs; B. Environmental Issues Grade 8 [potential exists to meet 3.0 Life Science: E. Interactions of Hydro-sphere & Atmosphere: 1. a. water cycle; b. distribution & circulation of water; c. physical properties of fresh/salt water; d. functions of the atmosphere layers.]	None
		1.0 General Reading Processes: Vocabulary D. Vocabulary. Develop and apply vocabulary.	None	1.0 Skills & Processes A. Constructing Knowledge; B. Applying Evidence and Reasoning; C. Communicate Scientific Information. Grade 6 - 3.0 Life Science: D. Evolution: 1. Growth & survival of organisms & species depend on physical conditions (resource competition; environmental changes); F. Ecology: 1. Number of organisms an environment can support depends on physical conditions & resources: a-d. Grade 7 - 3.0 Life Science: A. Diversity of Life: 1. Features of organisms	None
FASHION A FISH (K-4+) STUDENTS WILL DESCRIBE ADAPTATIONS OF FISH TO THEIR ENVIRONMENT; HOW ADAPTATIONS HELP FISH SURVIVE IN THEIR HABITATS; INTERPRET THE IMPORTANCE OF ADAPTATIONS IN ANIMALS. NOTE: THIS ACTIVITY INVOLVES ART. ANN ARUNDEL COUNTY SCIENCE STANDARDS Grade 6 - 3.8.6 Life Science: Evolution. Changes that occur (e.g., adaptations of plants & animals) in species of organisms as a result of the changes in Earth's physical environment over time; [potential exists to meet 3.8.13 Life Science: Ecology. Changes that occur due to interactions in the environment; determine if they are beneficial or detrimental (e.g., producer/consumer, predator/prey, or parasite/host)]; 6.8.2 Environmental Science: Interdependence of Organisms. Interdependency of organisms with the environment in a given ecosystem (i.e., producer/consumer, predator/prey, host/parasite)].	56	1.0 General Reading Processes: Vocabulary D. Vocabulary. Develop and apply vocabulary.	None	1.0 Skills & Processes A. Constructing Knowledge; B. Applying Evidence and Reasoning; C. Communicate Scientific Information. Grade 6 - 3.0 Life Science: D. Evolution: 1. Growth & survival of organisms & species depend on physical conditions (resource competition; environmental changes); F. Ecology: 1. Number of organisms an environment can support depends on physical conditions & resources: a-d. Grade 7 - 3.0 Life Science: A. Diversity of Life: 1. Features of organisms	None

				connect or differentiate them (external & internal features/behavioral pattern) E. Flow of Matter and Energy: 1. Plants and animals obtain & use food. Grade 8 - 3.0 Life Science: D. Evolution: 1. Evolutionary change is a result of natural variation/changes in organisms & environment.	
MIGRATION HEADACHE (GRADES 5-8) STUDENTS LIST LIMITING FACTORS AFFECTING HABITATS AND POPULATIONS OF MIGRATING WATER BIRDS; DESCRIBE THE EFFECTS OF LIMITING FACTORS, HABITAT LOSS & DEGRADATION ON POPULATIONS; MAKE INFERENCES ABOUT THE IMPORTANCE OF SUITABLE HABITAT. NOTE: INVOLVES PHYSICAL EDUCATION. ANN ARUNDEL COUNTY SCIENCE STANDARDS Grade 6 - 3.8.7 Life Science: Evolution. Factors that influence the size and stability of populations; 3.8.11 Biochemistry. All consumers in a food chain depend on the chemical energy provided by producers for survival; 3.8.13 Ecology. Changes due to interactions in the environment may be beneficial or detrimental (e.g., producer/consumer, predator/prey, or parasite/host); [potential exists to meet 6.8.1 Environmental Science: Flow of Matter & Energy. Matter is transformed between the physical environment & organisms (e.g., food webs, nitrogen cycle); the total amount of matter remains constant]; 6.8.2 Interdependence of Organisms. Interdependency of organisms with the environment in a given ecosystem. Grade 8 - 6.8.4 Environmental Science: Natural Resources & Human Needs. Different parts of the world have varying amounts & types of natural resources; use of resources determines environmental quality; 6.8.5 Environmental Issues: Human activities can accelerate or magnify many naturally occurring changes (i.e., erosion, air & water quality, populations).	15	1.0 General Reading Processes: Vocabulary D. Vocabulary. Develop and apply vocabulary.	Grade 7 3.0 Geography: D. Modifying & Adapting the Environment (trade offs & consequences when using natural resources; land use issues; how govt. addresses env. issues.	None	

ⁱ Activities meet standards as noted. When a standard is listed without notation, the activity meets the standard fully for all applicable grades for that activity.